A Geno Technology, Inc. (USA) brand name

Low Speed Centrifuge

Cat. No. BT616

1-800-628-7730 ♦ 1-314-991-6034 ♦ info@BTLabSystems.com

Thanks for choosing the BT616 Low Speed Centrifuge. This operation manual describes the function and operation of the instrument. Please read this manual carefully before operating the instrument.

INTRODUCTION

This centrifuge is suitable for 5ml, 7ml, 10ml, 15ml or 50ml tubes. It is used in laboratories in life science, medical science and the chemical industry.

SPECIFICATIONS

Voltage: 110-240V; 50-60Hz

Power: 120W

Max. Speed: 300−4500rpm

Max. RCF: 2700 X g

Speed Accuracy: ±20 rpm

Timing Range: 30s−99m:59s/continuous working

Rotor Capacity: 16x10ml/7ml/5ml; 12x15ml; 6x50ml tubes

Safety: Self-lock, Over speed protection, Status diagnosis system

Noise: ≤ 56 dB

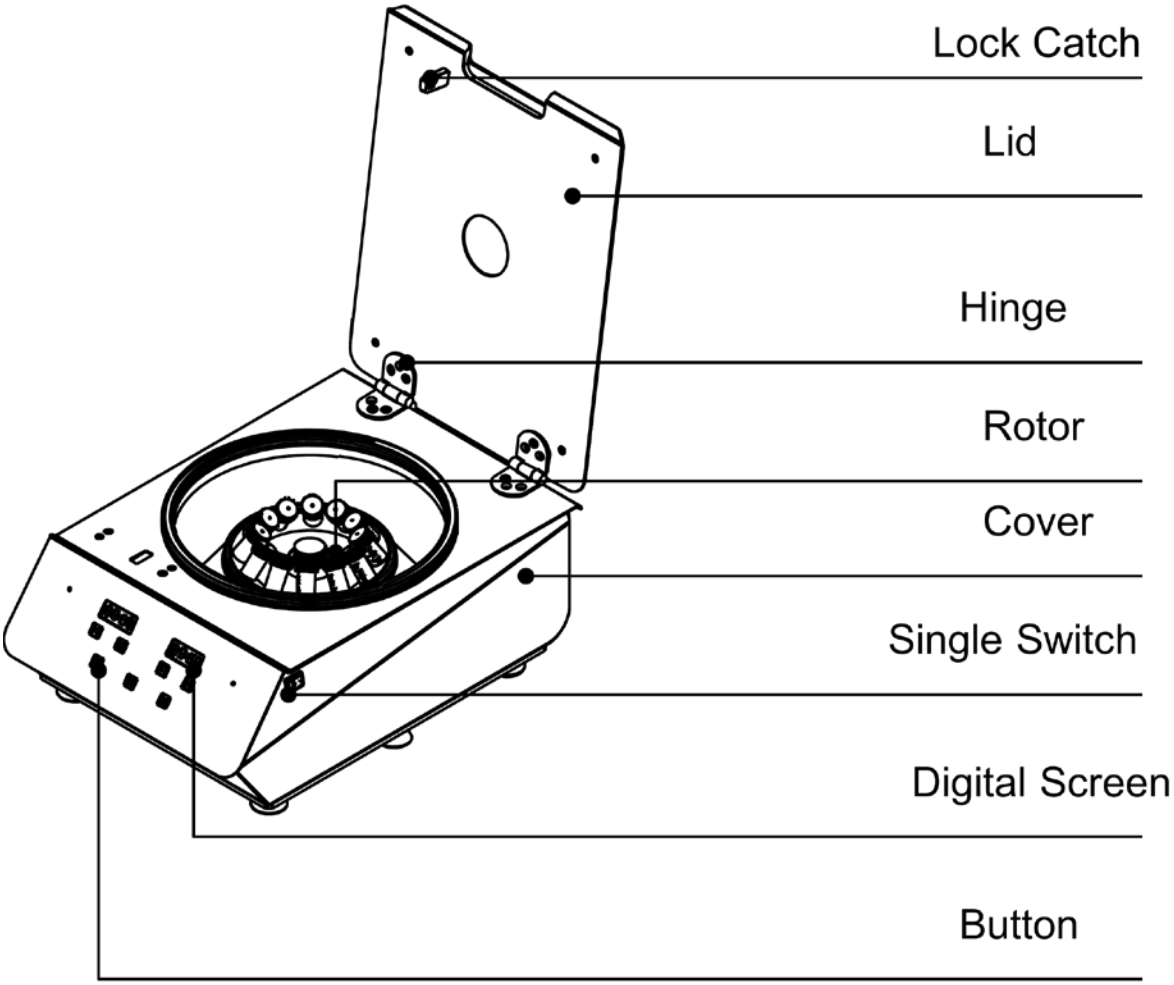
Increase/decrease speed: 20s ↑ 20s ↓

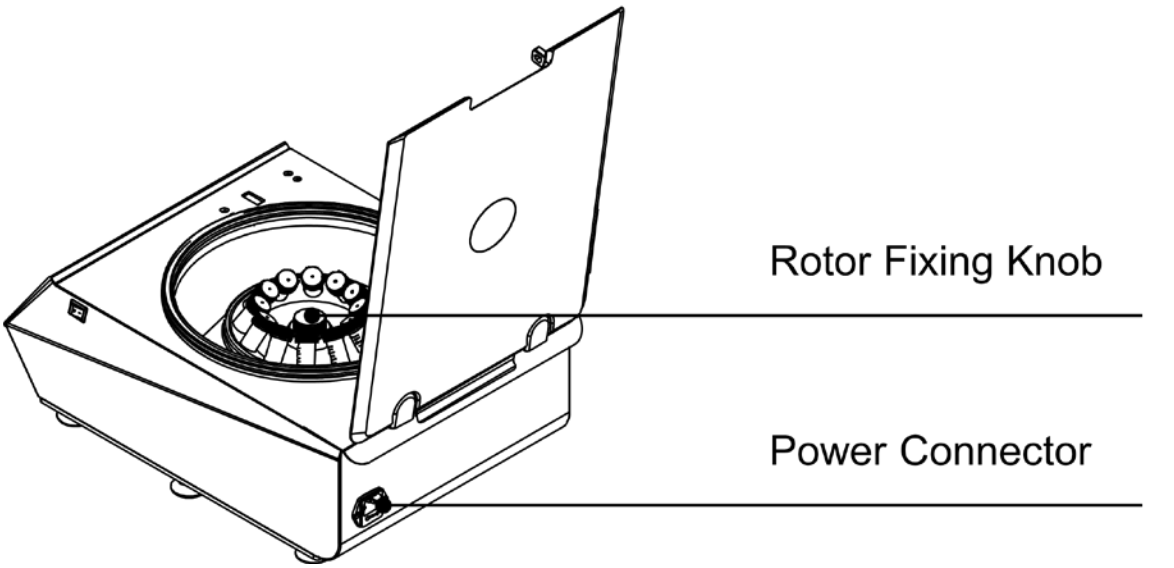
Other Functions : Speed/accelerated speed switch function, short operation, operating status display

Dimension (WxDxH)： 320mmX486mmX170mm

Net Weight (includes rotor)： 6kgs

OVERVIEW


Lock Catch
Lid
Hinge
Rotor
Cover
Single Switch
Digital Screen
Button


Rotor Fixing Knob
Power Connector

OPERATION

Operation Key

- START/STOP Start or stop operation
- SHORT-SPIN Short operation key. Hold down to spin
- LID OPEN Unlock the cover
- +/- Set time or speed value. Hold down +/- to quickly adjust value.

Rotor Installation and Removal

1. Fix the rotor to the motor shaft. Hold the rotor, screw the rotor fixing knob to the Rotor Fixing Shaft and rotate the knob tightly clockwise. The Rotor Fixing Shaft should not be loose when the knob is installed correctly.
2. To remove the rotor, hold the rotor, and rotate the rotor fixing knob counter clockwise. Screw off the knob and remove the rotor.
3. Turn the switch to "I", set the time and speed according to the above operation guide.
4. Close the cover, ensuring to latch and the device will begin to operate. When the operation completes, press the open button after the rotor is fully stopped. If needing to stop the operation during operating, turn the switch to "O".

IMPORTANT!! Make sure rotor is in good condition and is correctly and tightly installed before operating every time.

Sample Loading

The tubes must be placed evenly in the rotor. Samples in the tubes should be basically the same (including volume and density). Balanced placement of samples make the operation less wearing on the motor shaft and reduces operation noise.

Setting Time and Speed

1. Turn the power on, press the "Lid Open" key to open the cover. Check that the rotor is in good condition and is correctly and tightly installed.
2. Press + or – of the Time key to set timing value. Time range is 30 seconds to 99 minutes. Press + or – of the Speed key to set speed. Max. speed is 4500rpm.
3. Evenly place the centrifugal tubes in the rotor, close the rotor safety cover. Press the "Start/Stop" key to start operating. Press it again to stop operating.

   When the machine starts working, timing will start and display will show the remaining time. After time ends, the centrifuge stops operating and the cover unlocks automatically.

Short Operation

1. Turn power on, press the "Lid Open" key to open the cover. Check that the rotor is in good condition and is correctly and tightly installed.
2. Place centrifugal tubes evenly in the rotor, close the rotor.

3. Hold down the “SHORT-SPIN” key. It will spins at the max. speed (4500rpm). Release the “SHORT-SPIN” key and the operation will stop.

Opening the Lid When the Power is Off

1. When power is off, the lid cannot be opened.
2. First pull out the power line.
3. Press the shaft in the left hole on the machine. The lid switch will open.

IMPORTANT INFORMATION & WARNINGS

1. Do not use rotor that is cracked or damaged
2. Do not move the device while centrifuging

Sample and Tube Placement

1. Density of sample in the tube should less than max. allowed density.
2. Check the condition of the centrifugal tubes before placing them into the rotor. Do not use tubes that are cracked or damaged.
3. Make sure the tube lid is closed before putting it into the rotor
4. Place the centrifugal tubes symmetrically in order to make centrifuge stable.

MAINTENANCE

1. Any slight crack or damage will lead to potential safety hazard. Properly use the rotor and take care of it.
2. Do not allow corrosive material to touch the rotor.
3. If fluid spills out during operation, pull out the rotor and clean it with a non-corrosive cleansing fluid (PH=7±1) immediately.
4. Regularly clean the outer shell and the rotor (including holes) with diluent alcohol after power line is disconnected. Do not dip the instrument into fluid or water.
5. Check the rotor condition for any crack or damage. Make sure the rotor is in good condition then install the rotor correctly and tightly to the motor shaft.

TROUBLESHOOTING

Issue	Possible Causes	Solution
Not operating when power is on	Power line problem	Check the power line
	No power	Check the power
Cannot open the lid	Power is off	Turn power on
	Rotor is spinning	Stop device operation
	Lid Key broken	Contact BT Lab Systems
Instrument shaking during operation	Rotor not installed correctly	Install the rotor correctly and tightly
	Tubes are not balanced	Place the tubes in balanced holes
Display Er=01	Unlock circuit broken	Contact BT Lab Systems
Display Er=02	Lock circuit broken	Contact BT Lab Systems
Display Er=03	Motor control circuit broken	Contact BT Lab Systems

WARRANTY

BT Lab Systems' Low Speed Centrifuges are warranted against defects in materials and workmanship for 1 year. If any defects occur in the instrument or accessories during this warranty period, BT Lab Systems will repair or replace the defective parts at its discretion without charge. The following defects, however, are specifically excluded:

1. Defects caused by improper operation.
2. Repair or modification done by anyone other than BT Lab Systems or an authorized agent.
3. Damage caused by substituting alternative parts.
4. Use of fittings or spare parts supplied by anyone other than BT Lab Systems.
5. Damage caused by accident or misuse.
6. Damage caused by disaster.
7. Corrosion caused by improper solvent or sample.

This warranty does not apply to parts listed below:

1. Fuses
2. Lamps
3. Starters

For any inquiry or request for repair service, contact your local BT Lab Systems office. Inform BT Lab Systems of the model and serial number of your instrument.

TECHNICAL SUPPORT

BT Lab Systems offers technical support for all of its products. If you have any questions about the product's use or, operation, please contact BT Lab Systems at the following info.

E-Mail: info@BTLabSystems.com